

OBITUARY

WILLIAM HARDING LONGLEY

DR. WILLIAM HARDING LONGLEY, professor and chairman of the department of biology in Goucher College and executive officer of the Tortugas Laboratory of the Carnegie Institution of Washington, died on March 10, 1937, after a protracted illness. In his passing, zoology has lost one of its keenest students and Goucher College one of its most stimulating teachers.

Dr. Longley was born in Paradise, Nova Scotia, on October 27, 1881. He received the B.A. degree from Acadia University in 1898. After serving for five years as a principal in the public schools of Nova Scotia, he entered Yale, from which he received the degrees of B.A. in 1907, M.A. in 1908 and Ph.D. in 1910. After acting as instructor at Yale for one year, he became in 1911 instructor in biology and associate professor of botany at Goucher College. In 1914 he was made professor of botany and in 1919 professor of biology. In 1917 he succeeded Professor Wm. E. Kellicott as chairman of the department. He received in 1931 the honorary degree of doctor of science from Acadia University. He was a member of Phi Beta Kappa, Sigma Xi and numerous scientific societies.

In 1911 Dr. Longley went to the Dry Tortugas Laboratory of the Carnegie Institution of Washington as collector. While there he became interested in the possibility of using tropical reef fishes as material with which to test experimentally the Darwinian concepts of protective coloration and mimicry. Returning the following summer as investigator, he devoted this and many succeeding seasons to an intensive study of the rôle of color and pattern in the life of the fishes of the tropical reefs. During these years there developed between him and Dr. Alfred G. Mayer, director of the laboratory, a deep intimacy and a similarity of interest which made it but natural that he should be asked, upon the death of Dr. Mayer, to become director of the laboratory and to carry on the excellent tradition of accomplishment established by the latter. Under his leadership, the work of the laboratory grew rapidly, many eminent investigators from this country and abroad finding there a much-needed opportunity.

In order to discover the degree to which color, pattern and the ability to change both color and pattern are of use to the reef fishes, it was necessary to live with them for long stretches of time, to become acquainted with their habits and their ecological relations. Consequently he spent many hours a day under water, using a diving hood, recording observations by means of wax tablets and a water-tight photographic outfit. He thus came to know the tropical reef fishes of the Gulf of Mexico as no other man has ever known them.

The scope of these studies gradually widened until they covered the tropical reef fishes of the world. Under the auspices of the Carnegie Institution, he made several trips to Hawaii and Samoa, and on one occasion spent the better part of a year in a trip around the world, much of the time being spent in the Dutch East Indies. By means of undersea studies, he came to know with more or less intimacy the structure, habits and ecological relations of more than 350 species of Gulf fishes and over 400 species of Pacific fishes. He was also well acquainted with museum material. Under the same auspices, he was able to visit the principal museums of the world and to study the type specimens of most of the described species of reef fishes.

Concerned originally in testing the Darwinian theories of protective coloration and mimicry, his interests gradually spread with the years. He became interested in species, not from the purely taxonomic point of view, but from the standpoint of the student of evolution. This study led to a comprehensive statistical theory of the origin and spread of species, which was his chief concern in later years. As an incident to his study of species, for he never considered it more than incidental, his intimate knowledge of reef fishes in their native habitats as well as of type specimens in the museums led to a profound modification of their classification. He reduced over 20 per cent. of the recognized species of Gulf reef fishes to synonymy, and as a result the surviving species were seen to constitute clearly separable and distinct natural entities.

In his manner of working, Dr. Longley had many of the traits of Charles Darwin. He was his own severest critic, checking and confirming his facts with painstaking care and refusing to adopt his own hypothesis until every other alternative had been satisfactorily disposed of. His extreme caution led him to refrain from publication as long as any uncertainty existed with regard either to data or to the conclusions to be drawn from accumulated facts. Consequently, he published relatively seldom, apart from annual reports in the Year Book of the Carnegie Institution of Washington. At the time of his death he had almost ready for the printer the manuscript of an extensive monograph on the reef fishes of the Gulf of Mexico. This work, richly illustrated with undersea photographs and drawings from life, is a model of thoroughness and accuracy of observation and sets a new standard in the manner in which it emphasizes the necessity of knowing the living organism in its natural habitat. While unfinished, the manuscript is apparently in such a condition that it can be published. Whether his extensive notes on the

Pacific fishes can be utilized is at the present writing uncertain.

Dr. Longley was an inspiring teacher. Due largely to his influence, most of the major students in his department have gone into some form of active biological work. Many of his students have taken doctorates and a goodly number have made, and are making, significant contributions to knowledge. Few teachers in strictly undergraduate institutions have seen as many of their students entering fields of active research as he. His own passionate enthusiasm for research, and his deep personal interest in his students, of which they were keenly aware, made him an unusually successful teacher.

Dr. Longley was known to his colleagues as a man of sound judgment, endowed with more than his share of good hard common sense. He was a practical idealist, combining the highest standards in life and work with a realistic understanding as how best to maintain these standards. He will be missed, not only as an investigator, but as a stimulating and helpful friend and colleague.

In 1908, Dr. Longley married Hazel Fowler Baird. Mrs. Longley and three children survive him.

RALPH E. CLELAND

RECENT DEATHS AND MEMORIALS

DR. WILLIAM MORTON WHEELER, professor emeritus of entomology at Harvard University, died suddenly on April 19 at the age of seventy-two years.

DR. ALBERT POTTER WILLS, since 1909 professor of mathematical physics at Columbia University, died on April 17 at the age of sixty-four years.

THE *Journal* of the American Medical Association reports that the Arthur B. Duel Facial Palsy Clinic has been established at the Manhattan Eye, Ear and Throat Hospital in memory of the late Dr. Duel, who founded a clinic for facial palsy in the hospital in 1933 and was in charge of it until his death. Dr. Thomas G. Tickle, a former associate of Dr. Duel, is in charge of the clinic and will offer a course in the surgical technic and treatment of facial paralysis.

A COMMITTEE headed by Professor Sergent has been appointed to collect funds for a statue of Laënnec to be erected in Paris on a site in front of the Charité Hospital. The amphitheater in which Laënnec taught in the latter institution still exists and the wards in which the discoverer of auscultation first applied this method faced the square in which the proposed statue will be placed.

SCIENTIFIC EVENTS

THE DEPARTMENT OF HEALTH AT YALE UNIVERSITY

THE scope of the work of the Yale Department of University Health, which has general supervision of student health, including physical education, definitely increased last year, according to a university bulletin. This increase was especially marked in the medical, surgical and physical therapy departments. There were 21,045 medical consultations; 6,327 surgical consultations and 4,885 physical therapy consultations.

All entering students were tested with an improved form of tuberculin called "purified protein derivative." The total number of undergraduate freshmen tested with tuberculin was 846, of whom 42.4 per cent. reacted positively. The number of entering students from all other departments was 608, of whom 56.9 per cent. reacted positively. For the combined number the percentage of positive reactors to tuberculin was 48.4. The comparable figures for the year 1931-32 were 53.9 positive for freshmen, 71.7 positive for graduate students, or a combined percentage of 62.1 positive. The bulletin points out that "This marked drop in positive reactions to tuberculin presumably indicates a lessened exposure to which this group has been subjected, and is

consonant with results in other universities where this procedure is carried out."

Under the guidance of the department, 3,780 students last year took exercise for a total of 214,417 periods. The freshman program included instruction in correct body mechanics, optional sports and exercises as well as tests and instruction in leisure skills and games. The results of the tests given in recreational sports showed that 810, or 92 per cent., could swim; 316, or 37 per cent., could play golf, and 368, or 44 per cent. could play squash. All the 846 members of the freshman class, with the exception of sixteen who were excused by the department, could swim before the year was over.

Following the orthopedic examinations of the freshman class, 533 men were assigned to take corrective exercises. Before the end of the compulsory period, 66 per cent. of the total group were released. Of the entire number taking the corrective exercises, only a few more than 10 per cent. failed to pass the final examination. Supplementing the orthopedic examination a postural photograph of individuals with poor body mechanics is taken before any corrective work is given. Upon release from a corrective class, another photograph is taken to show improvement over the initial posture.